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NEW SET OF CLAIMS

1. Culture medium conditioned by cytokines and soluble factors released by immortalized untransformed hepatocytes that are differentiated, polarized epithelial cells; said medium being characterized in that it is free from conditioning
5 cells, when used, permitting the maintenance, proliferation and differentiation of adult mammalian cells.
2. Culture medium according to claim 1 wherein said hepatocytes are murine MMH cells.
3. Culture medium according to claims 1-2 wherein said MMH cells are
10 genetically modified.
4. Culture medium according to claims 1-3 wherein said cultured mammalian cells are cord-blood stem cells.
5. Culture medium according to claims 1-3 wherein said cultured mammalian cells are non human embryonic stem cells or adult stem cells including human.
- 15 6. Culture medium according to claims 1-3 wherein said mammalian cells are endodermal, ectodermal and mesodermal or their adult progenitor and stem cells.
7. Culture medium according to claims 1-6 characterized for further comprising at least one biological molecule selected from the group consisting of proteins, glycoproteins, lipoproteins, carbohydrates, lipids, glycolipids, peptides, antibodies,
20 cytokines, hormones and enzymes.
8. Culture medium according to claims 1-6 further characterized for being depleted for at least one biological molecule selected from the group consisting of: proteins, glycoproteins, lipoproteins, carbohydrates, lipids, glycolipids, peptides, antibodies, cytokines, hormones and enzymes.
- 25 9. Culture medium according to claims 1-6 wherein said untransformed hepatocytes are genetically modified in order to express at least one specific biological factor selected from the group of: proteins, glycoproteins, lipoproteins, carbohydrates, lipids, glycolipids, peptide, antibodies, cytokines, hormones and enzymes.
- 30 10. Culture medium according to claims 1-9 in form of a solid, a lyophilized, a powder, a gel, a film, or a freeze-dried compound.
11. Culture medium according to claims 4-6 wherein the maintenance, the

proliferation and the differentiation of mammalian cells is performed in order to further condition the MMH-conditioned medium.

12. Process for production of a culture medium comprising the steps of incubating immortalized untransformed hepatocytes that are differentiated,
5 polarized epithelial cells in a culture medium for at least 2 hours and separating said hepatocytes before the use for maintenance, proliferation and differentiation of adult mammalian cells.
13. Process according to claim 12 wherein the separation step is performed by filtration or by centrifugation.
- 10 14. Process according to claims 12-13 wherein said culture medium is RPMI, Ham's F12, Dulbecco's Modified Eagle's Medium (DMEM), RPMI 1640, Iscove's, McCoy's.
- 15 15. Process according to claims 12-14 wherein the cells grow in culture either in suspension or in adherence to an extracellular matrix, as monolayers or three-dimensionally.
16. Process according to claim 15 wherein the matrix is solid, such as plastic, or semisolid like a gels, such as collagen, gelatin or agar.
17. Mammalian cells treated with the conditioned medium according to claims 1-11 to be used in the medical field.
- 20 18. Mammalian cells according to claims 1-11 to be used for cellular transplantation protocols.
19. Mammalian cells according to claims 1-19 to be subjected to genetic engineering.
20. Mammalian cells according to claims 1-19 to be used for the production of
25 biological molecules.
21. Pharmaceutical composition comprising the mammalian cells according to claims 17-21 to be used in the medical field.
22. Pharmaceutical composition comprising the mammalian cells according to claims 17-21 to be used in cellular therapy protocols
- 30 23. Use of the conditioned medium according to claims 1-11 for the preparation of a culture medium for growing, expand, maintain and /or differentiate isolated

adult mammalian cells *in vitro*.

24. Use according to claim 23 wherein said isolated cells are cord-blood stem cells.

25. Use according to claim 23 wherein said isolated cells are non human
5 embryonal stem cells or adult stem cells.

26. Use according to claim 23 wherein said cells are endodermal, ectodermal and mesodermal and their adult progenitor and stem cells.

27. Use according to claim 23 wherein said cells are NK cells.

28. Use according to claim 23 wherein said cells are dendritic cells.

10 29. Use according to claim 23 wherein said cells are endothelial cells.

30. Kit for maintenance, proliferation and differentiation of adult mammalian cells, said kit comprising the culture medium according to claims 1-11 together with laboratory means and instructions for use.